

=> s 111 and textile?

45686 TEXTILE?

L12 36 L11 AND TEXTILE?

=> s 111 and carpet?

14710 CARPET?

L13 29 L11 AND CARPET?

=> s 111 and cloth?

87878 CLOTH?

L14 78 L11 AND CLOTH?

=> s 111 and fabric?

361278 FABRIC?

L15 87 L11 AND FABRIC?

=> s 112 or 113 or 114 or 115

L16 116 L12 OR L13 OR L14 OR L15

=> s 116 and fluoro?

TERM 'FLUORO?' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED

=> s 116 and fluorine?

69720 FLUORINE?

L17 67 L16 AND FLUORINE?

=> s 117 and acrylic

112187 ACRYLIC

L18 34 L17 AND ACRYLIC

=> s 117 and methacrylic

47646 METHACRYLIC

L19 26 L17 AND METHACRYLIC

=> s 118 or 119

L20 34 L18 OR L19

=> d 120 1-34

1. ~~5,830,963~~, Nov. 3, 1998, Fluorine-containing maleate, fluorine-containing fumarate, fluorine-containing copolymer and stainproofing agent; Motonobu Kubo, et al., 526/245, 243 [IMAGE AVAILABLE]

2. ~~5,776,061~~, Jun. 9, 1998, Antireflection filter; Shinsuke Ochiai, et al., 428/215; 427/387; 428/336, 337, 412, 429, 447, 451 [IMAGE AVAILABLE]

3. ~~5,728,963~~, Mar. 17, 1998, Method for producing fluorine-containing silicone compound; Yutaka Furukawa, et al., 570/155, 153, 156, 158 [IMAGE AVAILABLE]

4. ~~5,697,192~~, Dec. 16, 1997, Solar cell module and installation method thereof; Yuji Inoue, 52/173.3; 136/251, 291 [IMAGE AVAILABLE]

5. ~~5,668,212~~, Sep. 16, 1997, Aqueous organosiloxane liquid composition and its use; Hiroyuki Naito, 524/701, 706, 730, 731, 779, 780, 783, 786, 789, 794, 837, 838, 858, 861, 863 [IMAGE AVAILABLE]

6. ~~5,663,399~~, Sep. 2, 1997, Method for producing **fluorine**-containing silicone compound; Yutaka Furukawa, et al., 556/479; 252/182.13; 260/665R; 556/482 [IMAGE AVAILABLE]

7. ~~5,624,820~~, Jun. 17, 1997, Aqueous dispersion composition, preparation thereof, water-and oil-repellent and mold release agent; Motonobu Kubo, et al., 524/758, 792, 801 [IMAGE AVAILABLE]

8. ~~5,637,142~~, Jun. 10, 1997, Nonaqueous emulsified surface treating agent composition; Motonobu Kubo, et al., 106/285, 2, 14.41, 38.22, 287.23, 287.28; 252/8.62, 8.81; 428/375, 394, 395; 508/304, 489, 505, 577, 582, 590 [IMAGE AVAILABLE]

9. ~~5,630,846~~, May 20, 1997, Agent for treating **textile**, method for treating **textile** and treated **textile**; Kazuto Hara, et al., 8/127.1, 115.64, 115.68, 128.1; 427/389, 389.9, 394; 442/79, 91, 102 [IMAGE AVAILABLE]

10. ~~5,614,123~~, Mar. 25, 1997, Agent for treating **textile**; Motonobu Kubo, et al., 252/8.62; 106/2; 252/8.61; 526/242, 243, 244, 248 [IMAGE AVAILABLE]

11. ~~5,587,110~~, Dec. 24, 1996, Composition being capable of imparting conductivity and non-tackifying property, paint using the composition, and roller; Masayuki Yamana, et al., 252/511, 502; 423/449.4, 489; 428/357, 378, 922 [IMAGE AVAILABLE]

12. ~~5,589,657~~, Dec. 3, 1996, Substrates treated with polyfluoro nitrogen-containing organic compounds; Jack R. Kirchner, 442/80; 252/8.62; 428/423.1; 442/82, 94; 528/70; 560/335, 349, 356, 357, 358, 359 [IMAGE AVAILABLE]

13. ~~5,578,195~~, Nov. 19, 1996, Water and oil repellent fiber comprising a physically incorporated perfluoropolyether; Akihiko Ueda, et al., 442/80; 428/364, 903, 913; 442/82 [IMAGE AVAILABLE]

14. ~~5,565,564~~, Oct. 15, 1996, Polyfluoro organic trimer compounds having urea linkage; Jack R. Kirchner, 544/221; 252/8.62; 544/222; 560/357 [IMAGE AVAILABLE]

15. ~~5,548,022~~, Aug. 20, 1996, Aqueous dispersion type **stain-proofing** agent and method for its production; Katsuji Ito, et al., 524/839; 525/123, 454, 455 [IMAGE AVAILABLE]

16. ~~5,432,007~~, Jul. 11, 1995, Solvent-free organosiloxane composition and its use; Hiroyuki Naito, 428/447; 427/387; 528/8, 9, 15, 16, 18, 19, 25, 34 [IMAGE AVAILABLE]

17. ~~5,414,111~~, May 9, 1995, Polyfluoro nitrogen-containing organic compounds; Jack R. Kirchner, 560/357; 252/8.62; 428/319.3; 442/82, 92, 94; 544/221, 222; 560/337, 358, 359; 564/38, 54 [IMAGE AVAILABLE]

18. ~~5,411,766~~, May 2, 1995, Substrates treated with polyfluoro nitrogen containing organic compounds; Jack R. Kirchner, 427/393.4; 8/115.51, 115.6, 115.64, 115.66; 252/8.62 [IMAGE AVAILABLE]

19. ~~5,410,073~~, Apr. 25, 1995, Manufacture of polyfluoro nitrogen containing organic compounds; Jack R. Kirchner, 560/357; 252/8.62; 428/319.3; 442/80, 82, 91, 94; 544/221, 222; 560/337, 358, 359; 564/38, 54 [IMAGE AVAILABLE]

20. ~~5,292,799~~, Mar. 8, 1994, Solvent-free, cold-setting organosiloxane composition and its use; Hiroyuki Naito, et al., 524/783, 779, 786, 789; 528/16, 17, 18, 25, 29, 901 [IMAGE AVAILABLE]

21. ~~5,143,991~~, Sep. 1, 1992, Copolymer desoiling agent; Yoshio Amimoto, et al., 526/245 [IMAGE AVAILABLE]

22. ~~5,133,602~~, Jul. 28, 1992, Water and oil repellent composition; Takashige Maekawa, et al., 106/2, 13, 284.2; 428/368; 524/264 [IMAGE AVAILABLE]

23. ~~5,052,577~~, Oct. 15, 1991, Water and oil repellent; Masashi Matsuo, et al., 525/276; 427/412; 525/308, 902 [IMAGE AVAILABLE]

24. ~~4,803,116~~, Feb. 7, 1989, Waterproof **fabric** having high moisture permeability and method of making same; Jiro Amano, et al., 442/63; 427/246, 342; 428/315.5, 315.9, 423.1, 913; 442/77, 89 [IMAGE AVAILABLE]

25. ~~4,794,936~~, Dec. 27, 1988, **Stainproof** woven **fabric** for paper making and method for making the same; Takuo Tate, 442/71; 427/316, 322, 412, 419.8; 442/93, 208 [IMAGE AVAILABLE]

26. ~~4,761,459~~, Aug. 2, 1988, Surface modifier; Masashi Matsuo, et al., 525/479; 526/224; 528/30 [IMAGE AVAILABLE]

27. ~~4,749,625~~, Jun. 7, 1988, Amorphous metal laminate sheet; Tsutomu Obayashi, et al., 428/624; 148/403; 174/35MS; 428/461, 463, 464, 625, 626; 442/232 [IMAGE AVAILABLE]

28. ~~4,714,650~~, Dec. 22, 1987, **Stainproof**, flame-resistant composite sheet material; Tsutomu Obayashi, et al., 442/93; 428/365, 367, 379, 408, 414, 422, 424.4, 443, 447, 902, 921, 922; 442/85, 94, 136 [IMAGE AVAILABLE]

29. ~~4,695,488~~, Sep. 22, 1987, Soil release composition and use thereof; Iwao Hisamoto, et al., 427/385.5; 252/8.62; 427/379, 380, 381, 382, 383.7, 388.1, 389, 389.9, 392, 393.4; 510/528; 525/125, 129, 154, 155, 160, 178, 179, 181, 183, 186, 200, 201 [IMAGE AVAILABLE]

30. ~~4,686,135~~, Aug. 11, 1987, Composite sheet material; Tsutomu Obayashi, et al., 442/94; 156/306.9; 427/489, 491; 428/365, 367, 379, 408, 414, 421, 424.4, 443, 447, 476.3, 483, 518, 524, 920; 442/93, 136 [IMAGE AVAILABLE]

31. ~~4,646,991~~, May 19, 1987, **Fluorine**-containing graft copolymer and adhesive and composite membrane made thereof; Kiyohide Matsui, et al., 525/276, 391, 426, 535, 536, 905, 906 [IMAGE AVAILABLE]

32. ~~4,567,280~~, Jan. 4, 1983, Photopolymerizable composition; Syunichi Kondo, et al., 522/12; 430/281.1, 285.1, 286.1, 287.1, 289.1, 919, 923; 522/26, 27, 28, 179, 182, 183 [IMAGE AVAILABLE]

33. ~~4,219,625~~, Aug. 26, 1980, Fluorinated polyol esters; Frank Mares, et al., 524/288; 8/115.64; 427/393.4; 428/395; 524/605; 525/437; 528/272, 299; 560/83, 86, 87 [IMAGE AVAILABLE]

34. ~~3,769,060~~, Oct. 30, 1973, SPECIFIC PROCESSED CLOTHS AND A METHOD OF PRODUCING THE SAME; Shunya Ida, et al., 428/196; 427/160, 170, 210; 428/907, 920, 921, 922 [IMAGE AVAILABLE]

=> s stainproof?

L1 95 STAINPROOF?

=> s stain proof?

=> s stainresistant

L3 . 3 STAINRESISTANT

=> s stain resistant

21069 STAIN
218994 RESISTANT
L4 830 STAIN RESISTANT
(STAIN(W) RESISTANT)

=> s stain repellant

21069 STAIN
3400 REPELLANT
L5 40 STAIN REPELLANT
(STAIN (W) REPELLANT)

=> s stainrepellant

L6 0 STAINREPELLANT

=> s soil repellant

54264 SOIL
3400 REPELLANT
L7 31 SOIL REPELLANT
(SOIL(W) REPELLANT)

=> s soil releas?

=> s stain releas?

=> s 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19

L10 2568 L1 OR L2 OR L3 OR L4 OR L5 OR L6 OR L7 OR L8 OR L9

=> s 110 and fluorine

L11 69236 FLUORINE
402 L10 AND FLUORINE

=> s 110 and perfluoro?

TERM 'PERFLUORO?' EXCEEDED TRUNCATION LIMITS - SEARCH ENDED

=> s 110 and perfluoroalkyl?

L12 7389 PERFLUOROALKYL?
253 L10 AND PERFLUOROALKYL?

=> s 111 or 112

L13 466 L11 OR L12

=> s 113 and vinyl chloride

L14 152466 VINYL
317237 CHLORIDE
36665 VINYL CHLORIDE
(VINYL(W) CHLORIDE)
108 L13 AND VINYL CHLORIDE

=> s 114 and urethane?

L15 50475 URETHANE?
32 L14 AND URETHANE?

=> s 114 and urea

L16 63678 UREA
22 L14 AND UREA

=> s 115 or 116

L17 42 L15 OR L16

=> s 117 and acrylic

L18 112187 ACRYLIC
37 L17 AND ACRYLIC

=> s 117 and methacrylic

L19 47646 METHACRYLIC
30 L17 AND METHACRYLIC

=> s 117 and methacrylate

L20 65267 METHACRYLATE
35 L17 AND METHACRYLATE

=> s 117 and acrylate

L21 67509 ACRYLATE
39 L17 AND ACRYLATE

=> s 118 or 119 or 120 or 121

L22 42 L18 OR L19 OR L20 OR L21

=> d 122 1-42

1. ~~5,837,345~~, Nov. 17, 1998, Support for lithographic printing plate, process for the preparation thereof and electrochemical roughening apparatus; Atsuo Nishino, et al., 428/141; 101/453; 428/116, 118, 156, 182, 212 [IMAGE AVAILABLE]

2. ~~5,830,963~~, Nov. 3, 1998, Fluorine-containing maleate, fluorine-containing fumarate, fluorine-containing copolymer and stainproofing agent; Motonobu Kubo, et al., 526/245, 243 [IMAGE AVAILABLE]

3. ~~5,827,819~~, Oct. 27, 1998, Fluorourethane additives for water-dispersed coating compositions; Donald Douglas May, 524/590; 427/385.5, 393; 524/507, 591, 839, 840; 528/44, 63, 70 [IMAGE AVAILABLE]

4. ~~5,817,376~~, Oct. 6, 1998, Free-radically polymerizable compositions capable of being coated by electrostatic assistance; Albert I. Everaerts, et al., 427/483; 428/426, 451, 461, 473.5, 483, 492, 515, 537.5; 522/14, 15, 16, 17, 96, 99, 181, 182; 526/173, 183, 184, 196, 217, 220, 222, 225; 528/26 [IMAGE AVAILABLE]

5. ~~5,759,481~~, Jun. 2, 1998, Stain resistant composition containing sulphonated surfactant; Van Giao Nguyen, 252/8.62; 8/115.56, 557, 560, 589 [IMAGE AVAILABLE]

6. ~~5,756,181~~, May 26, 1998, Repellent and soil resistant carpet treated with ammonium polycarboxylate salts; Shou-Lu G. Wang, et al., 428/96; 442/91, 92, 93, 94 [IMAGE AVAILABLE]

7. ~~5,744,201~~, Apr. 28, 1998, Method for treating carpet using PH adjustment; John C. Chang, et al., 427/393.4, 421, 458 [IMAGE AVAILABLE]

8. ~~5,738,687~~, Apr. 14, 1998, Method for treating carpets with polycarboxylate salts to enhance soil resistance and repellency; Robert F. Kamrath, et al., 8/115.56, 115.54, 115.6, 115.65, 115.66, 128.1; 427/389, 389.9, 393.4, 394 [IMAGE AVAILABLE]

9. ~~5,714,082~~, Feb. 3, 1998, Aqueous anti-soiling composition; Gail S. Boardman, et al., 252/8.62, 8.57; 427/389, 389.9, 391, 393.4, 394, 395, 421, 430.1, 439; 428/96, 473, 537.5 [IMAGE AVAILABLE]

10. ~~5,712,062~~, Jan. 27, 1998, Carbon fluoride particles, preparation process and uses of the same; Masayuki Yamana, et al., 429/231.7; 106/2; 204/290R; 209/127.1; 252/500, 502; 419/23; 423/414, 439; 428/402; 508/112 [IMAGE AVAILABLE]

11. ~~5,693,737~~, Dec. 2, 1997, Water-dispersible blocked isocyanates, method of manufacture, and use thereof; Helmut Reiff, et al., 528/45; 8/115.6, 192; 252/182.2, 182.21, 182.22; 524/507, 591; 525/124; 528/59, 70 [IMAGE AVAILABLE]

12. ~~5,641,844~~, Jun. 24, 1997, Polymers with crystallizable fluoropolymers; Robert M. Thompson, et al., 526/245; 427/244, 389.9, 392, 393.5 [IMAGE AVAILABLE]

13. ~~5,576,095~~, Nov. 19, 1996, Water and oil repellent fiber comprising a physically incorporated perfluoropolyether; Akihiko Ueda, et al., 442/80; 428/364, 903, 913; 442/82 [IMAGE AVAILABLE]

14. ~~5,508,370~~, Apr. 16, 1996, Water-dispersible blocked isocyanates, method of manufacture, and use thereof; Helmut Reiff, et al., 528/45; 8/115.6, 192; 252/182.2, 182.21, 182.22; 524/507, 591; 525/124; 528/59, 70 [IMAGE AVAILABLE]

15. ~~5,133,802~~, Jul. 28, 1992, Water and oil repellent composition;

16. ~~5,057,577~~, Oct. 15, 1991, Water and oil repellent; Masashi Matsuo, et al., 525/276; 427/412; 525/308, 902 [IMAGE AVAILABLE]

17. ~~5,025,943~~, Jul. 30, 1991, Breathable foam-coated nonwoven pillow ticking; William S. Kinlaw, et al., 442/79; 428/306.6, 316.6, 920, 921; 442/123, 374, 401, 402 [IMAGE AVAILABLE]

18. ~~4,822,373~~, Apr. 18, 1989, Process for providing polyamide materials with stain resistance with sulfonated novolak resin and polymethacrylic acid; Maynard H. Olson, et al., 8/115.6, 115.54; 252/8.57, 8.62; 428/96; 442/93, 168 [IMAGE AVAILABLE]

19. ~~4,761,459~~, Aug. 2, 1988, Surface modifier; Masashi Matsuo, et al., 525/479; 526/224; 528/30 [IMAGE AVAILABLE]

20. ~~4,714,650~~, Dec. 22, 1987, **Stainproof**, flame-resistant composite sheet material; Tsutomu Obayashi, et al., 442/93; 428/365, 367, 379, 408, 414, 422, 424.4, 443, 447, 902, 921, 922; 442/85, 94, 136 [IMAGE AVAILABLE]

21. ~~4,694,488~~, Sep. 22, 1987, **Soil release** composition and use thereof; Iwao Hisamoto, et al., 427/385.5; 252/8.62; 427/379, 380, 381, 382, 383.7, 388.1, 389, 389.9, 392, 393.4; 510/528; 525/125, 129, 154, 155, 160, 178, 179, 181, 183, 186, 200, 201 [IMAGE AVAILABLE]

22. ~~4,694,859~~, Sep. 1, 1987, Fire barrier fabrics; Rick A. Porter, et al., 442/68; 5/483; 297/DIG.5; 427/369, 407.3; 428/307.3, 442, 913, 920; 442/136, 226 [IMAGE AVAILABLE]

23. ~~4,684,135~~, Aug. 11, 1987, Composite sheet material; Tsutomu Obayashi, et al., 442/94; 156/306.9; 427/489, 491; 428/365, 367, 379, 408, 414, 421, 424.4, 443, 447, 476.3, 483, 518, 524, 920; 442/93, 136 [IMAGE AVAILABLE]

24. ~~4,612,356~~, Sep. 16, 1986, Homo- and co- (addition) polymers of di-**perfluoroalkyl** carbamyl group containing (meth) **acrylate** monomers; Robert A. Falk, 526/243; 427/393.4 [IMAGE AVAILABLE]

25. ~~4,584,143~~, Apr. 22, 1986, Fluoroalkyl-carbamyl group containing acrylates and methacrylates; Robert A. Falk, 558/240; 526/243, 245; 560/159, 160 [IMAGE AVAILABLE]

26. ~~4,559,179~~, Dec. 17, 1985, **Fluorine**-containing vinyl compound; Iwao Hisamoto, et al., 558/51; 526/292.3, 292.9; 558/52; 560/166, 223, 254, 262; 568/610, 615 [IMAGE AVAILABLE]

27. ~~4,549,805~~, Sep. 10, 1985, Di-**perfluoroalkyl** carbamyl group containing acrylates and methacrylates; Robert A. Falk, 560/135, 160 [IMAGE AVAILABLE]

28. ~~4,491,620~~, Jan. 1, 1985, Flexible, nonstaining topcoat for an X-ray intensifying screen; James R. Joiner, Jr., 428/421; 250/483.1, 488.1; 378/185; 428/422, 458, 461, 463, 480, 483, 690, 691, 910, 913; 976/DIG.439 [IMAGE AVAILABLE]

29. ~~4,295,976~~, Oct. 20, 1981, Fluorinated anti-stain and **soil release** finishes; Andre L. Dessaint, et al., 442/80; 252/8.57, 8.62, 395, 406; 428/421; 560/15, 17, 154 [IMAGE AVAILABLE]

30. ~~4,144,667~~, Mar. 13, 1979, Carpet-treating compositions; Dennis P. Landucci, 428/96; 8/115.6; 106/15.05; 252/8.61, 8.62; 558/27 [IMAGE AVAILABLE]

31. 4,043,964, Aug. 23, 1977, Carpet treating and treated carpet; Patsy O. Sherman, et al., 524/520; 428/96, 421 [IMAGE AVAILABLE]

32. 4,020,867, Jun. 14, 1977, Terpolymers of fluoroalkyl ethers and maleic anhydride; William L. Wasley, et al., 526/247, 271 [IMAGE AVAILABLE]

33. 3,946,281, Dec. 7, 1976, Fluorinated carboxylic acid amides and polymerization products thereof; Helmut Huber-Emden, et al., 526/248; 252/8.62; 526/336, 345, 347; 564/208 [IMAGE AVAILABLE]

34. 3,919,183, Nov. 11, 1975, **Perfluoroalkyl** groups containing polymerisation products; Horst Jager, et al., 526/245, 248 [IMAGE AVAILABLE]

35. 3,916,053, Oct. 28, 1975, Carpet treating and treated carpet; Patsy O. Sherman, et al., 428/96; 427/322, 393.4, 393.5; 428/394, 395 [IMAGE AVAILABLE]

36. 3,901,864, Aug. 26, 1975, Polymerization products of **perfluoroalkylalkylmonocarboxylic** acid esters; Horst Jager, 526/246; 525/276; 526/245 [IMAGE AVAILABLE]

37. 3,840,542, Mar. 11, 1975, Process of treating fibrous articles with microcapsules containing hydrophobic treating agent; Syunya Ida, et al., 427/189; 8/526; 427/389.9 [IMAGE AVAILABLE]

38. 3,856,849, Dec. 24, 1974, CARBOXYLIC ACID **PERFLUOROALKYL** ESTERS; Helmut Huber-Emden, et al., 560/220; 526/229, 245, 246; 560/193, 197, 221, 223; 568/649, 669, 677, 842 [IMAGE AVAILABLE]

39. 3,844,827, Oct. 29, 1974, PROCESS FOR MODIFYING FIBROUS SUBSTRATES WITH FLUORINATED TERPOLYMERS; William L. Wasley, et al., 427/375; 428/500; 442/94 [IMAGE AVAILABLE]

40. 3,769,060, Oct. 30, 1973, SPECIFIC PROCESSED CLOTHS AND A METHOD OF PRODUCING THE SAME; Shunya Ida, et al., 428/196; 427/160, 170, 210; 428/907, 920, 921, 922 [IMAGE AVAILABLE]

41. 3,706,594, Dec. 19, 1972, FIBROUS SUBSTRATE TREATED WITH COPOLYMERS OF FLUOROALKYL ETHERS AND MALEIC ANHYDRIDE; William L. Wasley, et al., 442/94; 427/389.8, 393.4; 428/422 [IMAGE AVAILABLE]

42. 3,565,039, Feb. 23, 1971, PRINTING AND COATING APPARATUS; Robert K. Remer, 118/643, 61, 65, 325 [IMAGE AVAILABLE]